

**Commonwealth of Kentucky**  
**Division for Air Quality**  
**EXECUTIVE SUMMARY**

FINAL

Title V

Permit: V-04-058, REVISION 2

OWLS HEAD ALLOYS, INCORPORATED

BOWLING GREEN, KY

NOVEMBER 30, 2007

Sandra Cooke, Reviewer

SOURCE ID: 021-227-00135

AGENCY INTEREST: 40313

ACTIVITY: APE20070001

**SOURCE DESCRIPTION:**

Owls Head Alloys, Incorporated is a secondary aluminum processing plant in Bowling Green Kentucky. On December 12, 2004, the Division issued the proposed determination on the Title V permit for this facility which became final after 45 days. On June 28, 2005, the plant requested the registration of a new piece of equipment as an insignificant activity. The equipment, located outdoors in the scrap yard, is used to break apart the bales of compacted aluminum scrap brought to the facility for processing. The Division determined that although the predicted emissions for the bale breaker are very small, the equipment could not be considered an insignificant activity and the original Title V permit would therefore require a minor revision. However, an additional request from the source was received in May of 2006 to add two Rotary Furnaces and related equipment to the plant and modify certain sections/wording within the existing permit. Since the additions effectively double the source's output, a major permit revision was required. The two applications were combined in to revision 1 of the Title V Permit.

On June 18, 2007, this source requested a change to their permit to allow the construction of a low-speed pre-ripper and an air knife to further break apart scrap materials for the removal of non-aluminum elements in order to improve the chemistry of their final product. The request also proposed the construction of a vacuum hood that would extend over the new equipment as well as the bale breaker added under Revision 1 of the permit. This hood would be vented through a baghouse filtration system. The request was submitted as a possible 502 (b) (10) change, but was determined to require a minor permit revision review.

Investigation of the pre-ripper shows that it is another low speed, high torque device much like the bale breaker added in first revision to this permit and would not be subject to the requirement of a shredder set forth under 40 CFR 63, Subpart RRR. In order to maintain a non-shredder status, the speed of the equipment must never increase above the 55-rpm setting cited in the application. The air knife also removes materials not compatible with the aluminum melting process. Since the new equipment is located out of doors, it will be subject to the fugitives regulation, 401 KAR 63:010. The voluntary addition of a hood and baghouse should actually decrease particulate release from the site since the original bale breaker will now be covered by this control device.

In conclusion, a thorough analysis has been made of all relevant information available that pertains to this source. The Division has concluded that compliance with the terms of the permit will ensure compliance with all air quality requirements. Therefore, it is the Division's determination that a proposed Title V permit revision should be issued as conditioned.

**CREDIBLE EVIDENCE:**

This permit contains provisions that require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.